

CLAIMS:

1. An area light emitting device for use with an optical member, the area light emitting device comprising:

5 a transparent or translucent substrate; and  
an area light emitting element arranged on the substrate; wherein:

the substrate includes a first surface facing the area light emitting element and a second surface facing away from  
10 the area light emitting element;

the area light emitting element emits light that enters the first surface and exits from the second surface; and

the second surface includes a recess for accommodating the optical member in which the optical member changes the  
15 characteristics of light emitted from the area light emitting element.

2. The area light emitting device as claimed in claim 1, wherein the recess is positioned substantially at the  
20 center of the second surface.

3. The area light emitting device as claimed in claim 1, wherein the recess is defined by a bottom surface and side surfaces surrounding the entire periphery of the bottom  
25 surface.

4. The area light emitting device as claimed in claim 1, wherein the recess completely accommodates the entire optical member.  
30

5. The area light emitting device as claimed in claim 1, wherein the recess has a depth, and the optical member has a thickness, the depth of the recess being greater than the thickness of the optical member.  
35

6. The area light emitting device as claimed in claim 1, wherein the recess has a depth, and the optical member has a thickness, the depth of the recess being substantially the same as the thickness of the optical member.

5

7. The area light emitting device as claimed in claim 1, wherein at least the bottom surface of the recess is a rough surface.

10

8. The area light emitting device as claimed in claim 1, wherein the bottom surface of the recess has an arithmetic mean roughness Ra of 0.1 $\mu$ m to 10 $\mu$ m.

15

9. The area light emitting device as claimed in claim 1, wherein the area light emitting element is an organic electroluminescence element.

20

10. An optical device comprising:  
an optical member;  
a transparent or translucent substrate; and  
an area light emitting element arranged on the substrate;  
wherein:

25

the substrate includes a first surface facing the area light emitting element and a second surface facing away from the area light emitting element;

the area light emitting element emits light that enters the first surface and exits from the second surface; and

30

the second surface includes a recess for accommodating the optical member in which the optical member changes the characteristics of light emitted from the area light emitting element.

11. The optical device as claimed in claim 10, wherein the recess completely accommodates the entire optical member.

35

12. A method for manufacturing an area light emitting device including a transparent or translucent substrate and an area light emitting element arranged on the transparent substrate for use with an optical member, the method

5 comprising:

preparing the substrate to include a first surface and a second surface, with the first surface and the second surface being located on opposite sides of the substrate;

forming the area light emitting element on the first  
10 surface of the substrate, wherein the area light emitting element emits light that enters the first surface and exits from the second surface; and

forming a recess in the second surface of the substrate after said forming of the area light emitting element,  
15 wherein the recess is capable of accommodating the optical member in which the optical member changes the characteristics of light emitted from the area light emitting element.

20 13. The method as claimed in claim 12, wherein said forming a recess includes sandblasting the second surface of the substrate.

25 14. The method as claimed in claim 12, wherein said forming a recess includes:

covering the second surface, excluding the portion in which the recess is to be formed, with a mask; and

sandblasting the second surface in a state covered by the mask to form the recess in the portion of the second  
30 surface exposed from the mask.